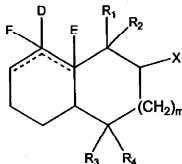


# IN THE CLAIMS:

- (Currently Amended) At least one  $\Delta$  compound defined according to the structure:



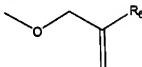
wherein m is 0 or 1;

wherein each of the dashed lines represent a carbon-carbon single bond or a carbon-carbon double bond with the proviso that not more than one dashed line represents a carbon-carbon double bond;

wherein X represents hydrogen or methyl;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl;

wherein D is =O when neither dashed line is a double bond, -OR<sub>5</sub> when either of the dashed lines is a double bond, -OR<sub>7</sub> when the dashed line in the  $\Delta 4,5$  position is a trisubstituted double bond, or



when the dashed line in the  $\Delta 3,4$  position represents a tetrasubstituted double bond;

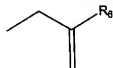
bond;

wherein R<sub>6</sub> is hydrogen or methyl;

wherein R<sub>7</sub> represents C<sub>1</sub> - C<sub>3</sub> lower alkyl;

wherein R<sub>8</sub> represents C<sub>4</sub> - C<sub>7</sub> cycloalkyl, C<sub>4</sub> - C<sub>7</sub> hydroxyalkenyl or tri- C<sub>1</sub> - C<sub>3</sub> lower alkyl silyl;

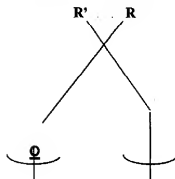
wherein E is hydrogen or



when neither dashed line is a double bond;

wherein F is hydrogen when neither dashed line is a double bond and D is not =O;

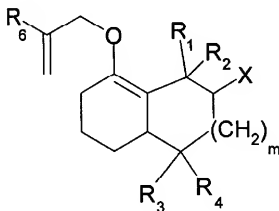
wherein D and E taken together represents the moiety:



when neither dashed line is a double bond;

wherein R and R' each represents hydrogen or methyl with the proviso that at least one of R and R' is methyl.

2. (Original) A compound of claim 1 defined according to the structure:



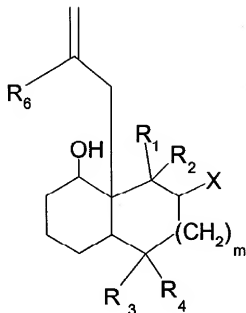
wherein m is 0 or 1;

wherein X is methyl or hydrogen;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl; and

wherein R<sub>6</sub> hydrogen or methyl.

3. (Original) A compound of claim 1 defined according to the structure:



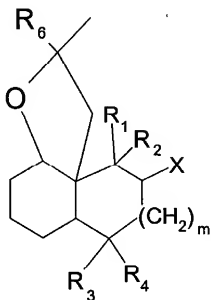
wherein m is 0 or 1;

wherein X is methyl or hydrogen;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl; and

wherein R<sub>6</sub> hydrogen or methyl.

4. (Original) A compound of claim 1 defined according to the structure:



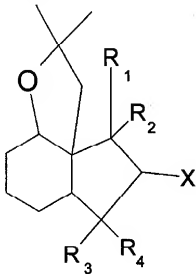
wherein m is 0 or 1;

wherein X is methyl or hydrogen;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl; and

wherein R<sub>6</sub> hydrogen or methyl.

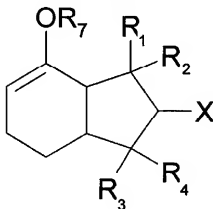
5. (Original) A compound of claim 4 defined according to the structure:



wherein X is methyl or hydrogen; and

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl.

6. (Original) A compound of claim 1 defined according to the structure:

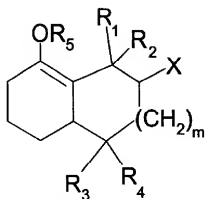


wherein X is methyl or hydrogen;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl; and

wherein R<sub>7</sub> represents C<sub>1</sub> - C<sub>3</sub> lower alkyl.

7. (Original) A compound of claim 1 defined according to the structure:



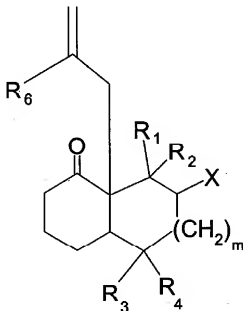
wherein m is 0 or 1;

wherein X is methyl or hydrogen;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl; and

wherein R<sub>5</sub> represents C<sub>4</sub> - C<sub>7</sub> cycloalkyl, C<sub>4</sub> - C<sub>7</sub> hydroxyalkenyl or tri- C<sub>1</sub> - C<sub>3</sub> lower alkyl silyl.

8. (Original) A compound of claim 1 defined according to the structure:

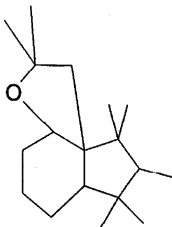


wherein m is 0 or 1;

wherein X is methyl or hydrogen;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl; and wherein R<sub>6</sub> hydrogen or methyl.

9. (Original) A compound of claim 5 having the structure:

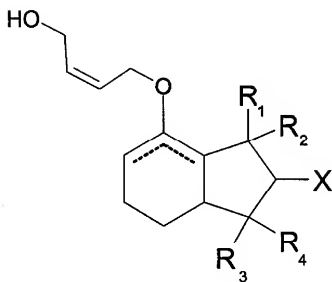
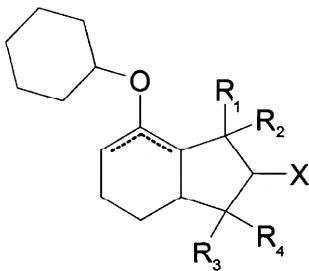


10. (Original) The optical isomers of the compound of claim 9:

(1R,5R,9R,11R)-Z	(1R,5S,9R,11S)-Z
(1R,5R,9R,11S)-Z	(1R,5R,9S,11S)-Z
(1R,5R,9S,11R)-Z;	(1R,5S,9S,11R)-Z
(1R,5S,9R,11R)-Z;	(1R,5S,9S,11S)-Z
(1S,5R,9R,11R)-Z;	(1S,5R,9S,11S)-Z
(1S,5R,9R,11S)-Z;	(1S,5S,9R,11S)-Z
(1S,5R,9S,11R)-Z;	(1S,5S,9S,11R)-Z
(1S,5S,9R,11R)-Z;	(1S,5S,9S,11S)-Z

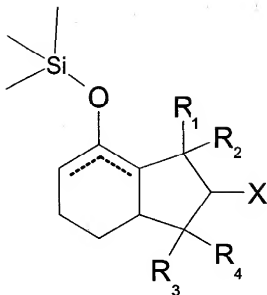
wherein "Z" represents the compound name, "3,3,10,10,11,12,12-heptamethyl-4-oxatricyclo[7.3.0.0<1,5>]dodecane".

11. (Original) A compound of claim 7 having a structure selected from the group consisting of:



and

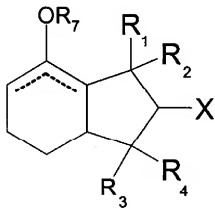




wherein X is methyl or hydrogen;

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each represent methyl or ethyl with the proviso that when X is methyl, each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is methyl and when X is hydrogen, one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> is ethyl; and wherein in each of the molecular structures one of the dashed lines represents a carbon-carbon double bond and the other of the dashed lines represents a carbon-carbon single bond.

12. (Currently Amended) A composition comprising a A mixture of compounds represented by the structure:



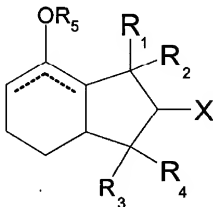
wherein in the mixture, in each of the compounds, one of the dashed lines represents a carbon-carbon double bond and the other of the dashed lines represents a carbon-carbon single bond;

wherein X is methyl or hydrogen;

wherein R<sub>7</sub> is C<sub>1</sub> - C<sub>3</sub> lower alkyl; and

wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  each represent methyl or ethyl with the proviso that when  $X$  is methyl, each of  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  is methyl and when  $X$  is hydrogen, one of  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  is ethyl.

13. (Currently Amended) A composition comprising a ~~A~~ mixture of compounds defined according to the structure:



wherein in the mixture, in each of the compounds, one of the dashed lines represents a carbon-carbon double bond and the other of the dashed lines represents a carbon-carbon single bond;

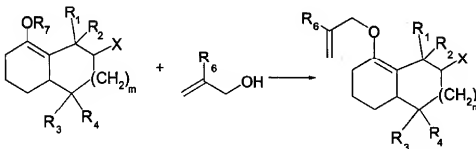
wherein  $X$  is methyl or hydrogen;

wherein  $R_3$  represents  $C_4 - C_7$  cycloalkyl,  $C_4 - C_7$  hydroxyalkenyl or tri- $C_1 - C_3$  lower alkyl silyl; and

wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  each represent methyl or ethyl with the proviso that when  $X$  is methyl, each of  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  is methyl and when  $X$  is hydrogen, one of  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  is ethyl.

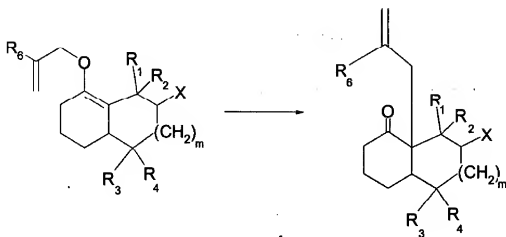
14. (Currently Amended) A At least one compound of claim 1 which is incorporated into a fragrance formulation.
15. (Currently Amended) A method for improving, enhancing or modifying the odor properties of a fragrance by incorporating an olfactory acceptable amount of at least one the compound of claim 1.
16. (Original) The method of claim 15 wherein the fragrance is incorporated into a product selected from perfumes, colognes, toilet waters, personal care products, cleaning products and air fresheners.
17. (Original) The method of claim 16 wherein the cleaning product is selected from the group consisting of detergents, dishwashing compositions, scrubbing compounds and window cleaners.
18. (Original) The method of claim 16 wherein the product is a personal care product.

19. (Currently Amended) A method for improving, enhancing or modifying the odor properties of a fragrance by incorporating an olfactory acceptable amount of the composition mixture of claim 13.
20. (Currently Amended) A method for improving, enhancing or modifying the odor properties of a fragrance by incorporating an olfactory acceptable amount of at least one the compound of claim 4.
21. (Currently Amended) A method for improving, enhancing or modifying the odor properties of a fragrance by incorporating an olfactory acceptable amount of at least one the compound of claim 5.
22. (Original) A method for improving, enhancing or modifying the odor properties of a fragrance by incorporating an olfactory acceptable amount of the compound of claim 9.
23. (Original) A method for improving, enhancing or modifying the odor properties of a fragrance by incorporating an olfactory acceptable amount of at least one isomer of claim 10.
24. (Original) A method for improving, enhancing or modifying the odor properties of a fragrance by incorporating an olfactory acceptable amount of at least one compound of claim 11.
25. (Original) A process for synthesizing the compound of claim 2 comprising the step of carrying out the reaction:



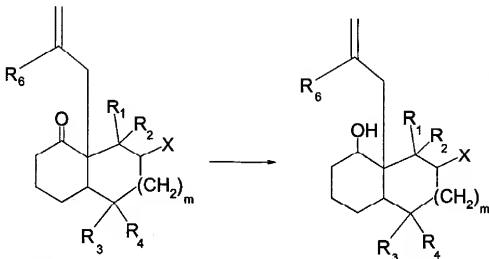
in the presence of a catalytic amount of a protonic acid.

26. (Currently Amended) A process for synthesizing the compound of claim 8 ~~comprising the step of effecting the~~ via the Claisen rearrangement reaction:



at about 190-210°C in the presence of a mild acid catalyst, said catalyst is selected from the group consisting of phosphoric acid, potassium diacid phosphate, sodium diacid phosphate, sodium bisulfate, an acid ion exchange catalyst, disodium citrate and hydroquinone.

27. (Original) A process for preparing a compound defined according to claim 4 comprising the steps of first carrying out the reaction:



using a metal hydride reducing agent; and then carrying out the reaction:  
using a protonic acid cyclizing agent.